

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1965 A

UNCLASSIFIED
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Round Numbers V-348/PW-2, V		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(a)		8. CONTRACT OR GRANT NUMBER(*)
White Sands Meteorological	Team	DA Task 1F665702D127-02
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19. KEY WORDS (Continue on reverse side if ne	coseasy and identify by block number,	
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Meteorological data gathere lumbers DK-001, DK-002, DK-are presented in tabular fo	d for the launching of 003, Round Numbers V-3	the 19318B MLRS, Missile 48/PW-2, V-349/PW-3, V-350/PW-

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INTRODUCTION

193183 MLRS, Missile Numbers DK-001, DK-002 and DK-003. Round Numbers V-348/PW-2, V-349/PM-3 and V-350/PW-4, were launched from LC-33, White Sands Missile Range (MSMR), New Mexico, at 0.933:16, 0.933:20 and 0.933:25 MDT, 21 Oct 82. The scheduled launch times were 0.930:00, 0.930:04.5 and 0.930:09 MDT.

DISCUSSIO'I

Meteorological data were recorded and reduced by the Uhite Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

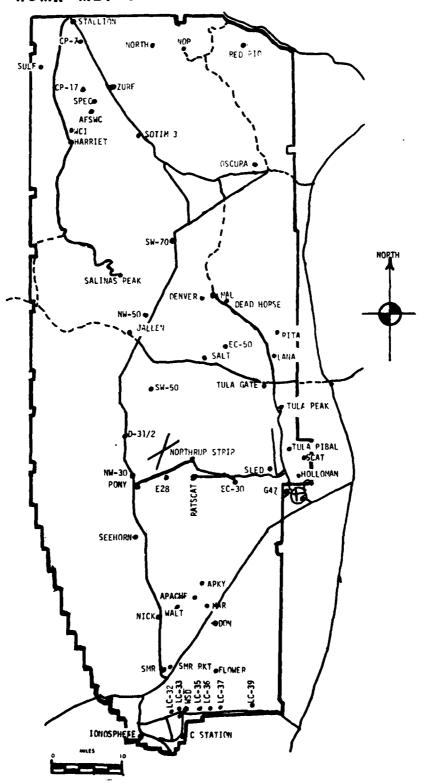
- 1. Observations
 - a. Surface
- (1) Standard surface observations to include pressure, temperature (0 C), relative humidity, dew point (0 C), density (gm/m 3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.
- (2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.
 - b. Upper Air
- (1) Low level wind data were obtained from pilot-balloon observations at:

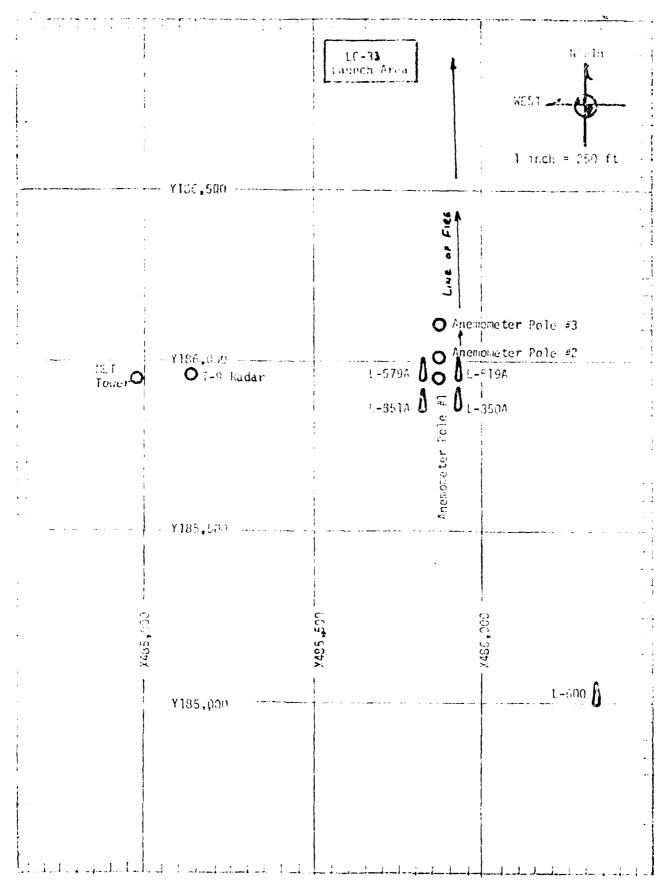
SITE AND ALTITUDE WSD 2km DON 2km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME LC-37 0630 MDT USD 0730 MDT LC-37 0830 MDT WSD 0934 MDT

WSMR METEOROLOGICAL SITES





PPOJECT SURFACE OBSERVATION

1.015								STATICH LC-33 E & A	3 E & A		
DATE 21	Oct 82	82	}				7-	= 484,982.6	4 Y= 18	,= 484,982.64 Y=185,957.73 H=3995.00	3995.00
7112E	1 g.	TE:PE	SE JE SE	DEW POINT) 1;;;T	PELATIVE HUTTOITY	* F2 (15)	DIPECTION degs In	WIND SPEED kts	DIPECTION SPEED CHAFACTER A degs In kts kts	VISIBIL- iTY
0934	886.0		9.6		0.4	51	1089	025	03		50
•											

	2nd LAYER	TYPE J HOT AMT TYPE HGT AUT TYPE HGT	AV-I-D			
נוס		AMT TYPE HST AMT TY	-			
	SHOLL DIRECTOR	TO VISIBILITY AMI			 1	

PSYCHROPETRIC COMPUTATION

TIME: 0934

DRY BULB TEMP. 9.9

WET BULB DEPR. 5.3

WET BULB DEPR. 4.6

DEW POINT 0.4

RELATIVE HUMID. 51

FULE #1 X485,874 1185,958 94018.74	3.90 1		# OLE #2 X435,87- Y306,013 H4033.13 53.0 ft			POLE #3 x485,977 Y186,116 H4063,92 of.6 ft.	1.0£	
EC LC	DIR DEG	55EEB 1073	T-TIME SEC	DIR DEG	SPEE MNOTE	T-TIME T SEC		SPEED KNOTS
T- (a)	042	05	T-30	020	03	T-30	019	05
T-70	037	05	T-20	020	04	T-10	013	05
7-10	035	05	T-10	012	04	T-1)	015	05
Ta.0	031	05	T0.0	011	04	To.0	013	05
T+10	024	00	T+10	003	03	T+10	000	06

TABLE 3 LC-33 METFORGLOGICAL TOWER AREM METER MEASURED WINDS (202 FT TOWER)

X484,982.64,		3, H3983.00 (base)	CEVEL #2, 62 X484,382.64,		3, H3983.00 (base)
1-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T - 30	030	04	T- 30	026	04
T-20	037	04	T-20	026	03
T- 10	031	03	T-10	012	03
Tejo	023	03	To.o	013	04
T-13	011	04	T+10	012	03

16 VET #3, 10 X484,982.04		'3, H3983.00 (base)	CEVEL 74, 20 X484,982.64		3, H5983.co (base)
T-TIME SEC	DIR OLG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	043	04	T-30	013	04
T-20	038	04	T-20	012	04
T-10	036	03	T-10	354	03
T 0.0	035	03	T0.0	005	03
T+10	033	03	T+10	009	03
and the same of th	la a a a a a a a a a a a a a a a a a a				L

^{*} POLE #1 DIRS. WERE ESTIMATED.

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 21 Oct 82

SITE: USD

TIME: 0934 11DT

WSTM COORDINATES:

³ 488,852.29

y 184,982.45

H=3,993.75

SITE: DON

TIME 0934 MDT

WSTM COORDINATES:

x = 511,988.37

y = 247,396.36

H=3,996.83

LAYER MIDPOINT	DIRECTION	SPEED	LAYER MIDPOINT	DIRECTION	SPEED
METERS AGE	DEGREES	KNOTS	METERS AGE	DEGREES	KNOTS
SURFACE	335	04	SURFACE		CALM
150	332	02	150	346	04
210	359	05	210	349	05
270	358	05	270	354	04
330	355	04	330	001	04
390	012	06	390	611	04
500	030	04	500	037	04
650	035	03	650	007	02
800	302	06	800	303	04
950	295	06	950	286	04
1150	287	04	1150	287	03
1350	318	02	1350	322	04
1550	321	04	1550	321	90
1750	277	04	1750	272	07
2000	244	09	2000	267	10

Data obtained from a MIKE-HERCULES
Radar Tracked pilot-balloon observation.

Data obtained from a Single-Theodolite Tracked pilot-balloon observation.

AIMING AND THTIME COMPUTER MET MESSAGES 21 Oct 82

LC-37 00	30 MDT	MSD 0730 MDT
METCM1324	nę3	METCM1324064
211250124	882	211350122334
00000000	27860882	0005300€ 27720884
01061006	28260871	01026007 28110374
02040006	28420846	02040005 28380848
03573004	28450806	03590004 28460208
04507000	28400759	04494008 28420761
05510009	20020715	05503007 28040716
06470013	27600672	06465012 27620674
07435017	27190632	07492016 27280633
08515016	27080593	08518914 27140595
09544012	26700557	09530011 26710558
10540010	26290522	10543009 26300524
11553021	26030489	11548018 25990491
12546038	25600443	12553037 25560444

LC-37 08	TG!1 0E	WSD 0934	IIDT
METCM1324	063	METCH1324	264
211450124	383	211560122	386
20000000	27990883	00631004	28350086
01620010	23170873	01010094	28350875
02023009	28420847	02017005	28460049
03505004	28500807	03537003	28480309
04512005	23430760	04551004	28410762
05502005	28060716	05538004	28000713
06467012	27650073	06464009	27590675
07493015	27290633	07502013	27330F34
08513013	27180594	08 540013	27150596
09550010	26300558	09 539009	26700559
10520009	26410523	10518016	26410525
11545021	26170491	11552027	26140492
12554038	25720444	12563036	25660445

STATION ALTITUDE 4051.37 FEET 21 UCT. 82 0630 MDT ASCENSION NO. 108	HSL.	SIGHIFICANT 29401 LC-37 TABLE	SIGNIFICANT LEVEL DATA 2940160108 LC-37 TABLE 6	A T A	GEODETIC COOMDINATES 32-40175 LAT DEG 106-31232 LON DEG
PRESSURE	RE GEOMETRIC ALTITUDE	TEMPERATURE AIR DEMPUI	PATURE DEMPOINT	HEL.FIUM. PERCENT	
MILLIBARS		S	CENTIGRADE		
882.0	4051.4	8 • S	-1.5	65.0	
879.0		7.2	2.4-	0.77	
6.498		10.0	7.5	47.0	
0.058		10.6	7.7	0.0*	
835.2	5538.2	10.0	-3.0	0.03	
₩.008		10.8	0.1	47.0	
791.2	7018.7	10.6	Ð.,	45.0	
769.4		11.3	-6-1	29.0	
700.0	10349.1	5.3	6.8-	35.0	
661.9	_	1:1	-7.0	52.0	
9299	12052.9	6.	-11.1	0.0	
639.8	_	æ. !	-12.1	42.0	
629.1	13177.0	-2.4	-16.1	0.40	
611.9		3.6	-22.2	20.0	
8000	~ ·	-1.5	-23.3	17.0	
992.8	-	-2.1	-23.2	0.81	
373.4		0.4	-22.0	23.0	
519.7	_	-11.0	-27.5	24.0	
508.5		-11.4	-29.3	21.0	
0.000		-12.0	-29.3	22.0	
473.2	_	-14.3	-35.3	18.0	
#*99#	•	-14.3	-33.9	17.0	
8.984	21914.5	-16.4	-35.1	19.0	
0.004	24592.3	-23.6	-41.1	10.0	

STATION AL 21 OCT. 62 ASCENSION	.TITUDE 40	051.37 FEET 0630 MDT	ET MSL	j	UPPER AIR UAI 294018U108 LC-37 TABLE 7	0.5 0.5		vE00rTlC 32-4 106-3	LTIC COORDINATES 32-40175 LAT DEG 06-31232 1 ON DEG
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIHARS	TEMF AIK Degrees	TEMPERATURE AIK UEWPOINT GREES CENTIGRADE	RLL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	"INU DAT	SPEEU KNOTS	INDEX OF REFRACTION
-	882.0			65.0	1104.0		0.	•	1.000273
ė	867.5	0	-1.0	46.4	1064.8	650	308.8	.,	1.000264
5000.0	851.8	10.6	1-2-1	6.0	1043.4		308°8 808°8	1.6	1.000257
å	821.2	, 0	-1.8	42.8	1000.7	650.7	3000		1.000250
	806.3	0	_	45.8	987.0		30	4.1	1.000248
•	791.7	0	•	45.1	5		.0	5.1	.00024
7500.0	777.4	11.0		34.9	9.050	657.5	268.9	6.9	1.000233
ė,	7.02.6	- 0	2.4.	C4.0.	134.0		307	0.,	*00022
;;	735.7	8 40	-7.3	31.8	#•8U6	654.3			1.000223
: 3	722.3	7.3	•	33.0			0.487	8.5	.00021
0000	709.1	•	-8.5	34.2	883.0		277.1	9.5	1.000212
10500.0	0.969	4.0	-8.7	36.7	•		272.3	11.0	00021
1000	683.1	•	-8-1	45.4	858.7		269.5	12.9	•
1500.	670-4	•		48.1	847.0		207.	14.7	1.000206
2000	65/69	•	-10.5	0 • £ ti	304.0		6.60%	15.4	1.000200
12500.0	040 040 040 040	7	-11.7	41.5	822.8	C+#+1	271.2	16.1	1.000196
3500	621.4	200	2.8.1	27.7	798.8		277.9	16.2	
4000	_	-2.1		19.1	783.1	_	282.2		1.000160
4500.	598.0	-1.9	-23.2	17.7	767.7		267.4	15.2	1.000176
5000	586.6	-2.9	-22.6	20.2	755.9		293.6	14.3	1.000174
5500.	575.5	C • • • •	-22.0	23.0	の・まなと		8.662	'n.	
06	100 to 10	2.4	123.1	23.62	733.6	637.8	307	12.4	1.000168
7000	542.7	9	-25.2	23.6	712.7		304.5	: .:	1.000163
7500.	532.2	4.6-	-26.2	23.8	702.5		305.0	11.3	1.000160
8000	521.9	-10.7	-27.3	24.0	692.5		305.5	11.5	1.000158
8200	511.7	~	-28.7	21.9	680.5		308.0	÷	1.000155
9000	501.7	Ξ	29.	21.8	668.6	659.8	204.7		1.000152
19500.0	491.8	2	30.	20.8	657.5		310.9	÷	1.000149
÷	482.1	13	31.	19.3	9.949		6.505	÷	1.000146
•	472.5	-14.3	#F.	17.9	635.8		309.2	29.5	1.000144
÷	463.1	-	÷.	17.2	623.9		•	'n.	1.000141
500	\$ 00 m		3.	17.6	513.8	625	· · · · · · · · · · · · · · · · · · ·	÷.	*
900	10 0 12 1 13 1 13 1	•	35	14.0	_	624	•	٥	00013
500	2 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 ·	0.0	ģ:	•	7 + day	0 K			. 100013
23500.0	418.3	-20.7	-33.7	18.0	577.1	619.1			1.000130
	,	ļ							

STATION ALTITUDE ' 21 oct. 82 Ascensium no. 101	.TITUDE 40 ! NO. 108	4051.37 FEFT MSL. 0630 MDT 18	F 7 MSL		2940180103 LC-3/ TABLE 7 Cont'd			GEODET 32 32 106	SEODETIL COUNDINATES 32-40175 LAT DEG 106-31232 LON DEG
GEOMETRIC ALTITUDE MSL FEET	SECMETRIC PRESSURE ALTITUDE MILLIBARS	TEM AIK Degrees	TEMPERATURE AIK DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	REL.HUM. DENSITY SPEED OF PERCENT GM/CUBIC SOUND METER KNOTS	SPEFU OF SOUND KNOTS	WIND DATA LIRECTION SPEED !/EGREES(IN) KNOTS	TA SPEED KNOTS	INDEX OF REFRACTION
24500.0	409.8	-22.0	139.8	18.0	568.4	568.4 617.4 559.9 615.8			1.000128

9E0DETIC COOKDIMATES 32.4U175 LAT DEG 106.31232 LON DEG	#IND DATA UINECTION SPEED JEGREES(IN) KNOTS	305.8 1.7 303.1 4.5 291.2 7.3 273.4 10.5 270.5 15.9 286.3 15.4 304.1 10.9 309.9 18.3
MANDATORY LEVELS 2940150108 LC-37 TABLE &	TEMPERATURE KEL.HUM. AIR DEWPOINT PERCENT DEGREES CENTIGRADE	-2.4 -6.8 -6.8 -8.9 -11.5 -11.5 -24.4 -24.4 -29.3 -24.9 -24.9
1 × 5L	PRESSURE CEUPOTENTIAL AIR ILLIBARS FEET DEGRE	5054. 10.6 6710. 8475. 9.7 10339. 5.3 123061.8 165467.1 1905712.0 2168234.6
. ALTITUDE 4051.37 FEFT MSL 82 0N NO. 108	PRESSURE C	00000000000000000000000000000000000000

STATION ALTITUDE 3989.00 Fret MSL 21 OCT: 82 ASCENSION NO. 511	4SH	SIGNIFIC 29 WHI TAB	SIGNIFICANT LEVEL DATA 2940020511 WHITE SANDS TABLE O	ATA	ULODLIIL COUMUINATES 32-40043 LAT UEG 106-37033 LON DEG
PRESSUR	PRESSURE GEOMETHIC	TEMPE	TEMPERATURE AIR DESPOINT	KEL.HI,M. PERCEUT	
MILLIBARS		DEGREES	CENT GRADE		
884.2	3989.0	3.4	-2.1	67.0	
875.5	4254.8	8•0	-2.6	47.0	
850.0	5059.0	10.1	-1.0	40.0	
793.0	6921.9	10.8		7.04	
772.8	7665.6	11.6	₽0.	30.0	
700.0	10351.6	5.3	¿.6-	34.0	
6.899	11564.2	1.9	4.7-	7.84	
641.7	12659.8	7	-14.5	35.0	
624.3	13380.8	-1.2	-23.7	16.0	
615.5	13753.3	 2	-22.9	10.0	
590.1	14857.3	-2.3	-<1.6	21.0	
525.2	17851.8	-10.5	-24.5	21.0	
517.4	18230.4	-10.6	-29.1	50.0	
200.0	19093.0	-12.3	-30.6	20.0	
4.79.8	20125.2	-14.5	-34.1	17.0	
458.0	21281.2	-15.8	-35.B	16.0	
451.8	23305.4	-20.3	-39.5	16.0	
0.004	24591.1	-23.3	-38.6	23.0	
388.7	25279.4	9.42-	-39.7	23.0	

STATION ALZ 21 OCT - 82 ASCENSION	117UDE NO. 51	3989.00 FEE' 0730 MDT 1	7 MSL	-	UPPER AIR DAI 2940020511 WHITE SANDS TABLE 10	0 n i A 11 10 s		ύΕυδεΤΙς 32•40 106•37	ETIC COUNDINATES 32.40043 LAT DEG 06.37033 1.0M DEG
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	30	TEMPERATURE AIR DEWPOINT GREES CENTIGRADE	REL . HUM. PERCENT	DENSITY GM/CUBIC METER	SPEEL OF SOUND KNOTS	#IND DATA DIRECTION 5 (EGREES(IN) K	SPEED KNOTS	INUEX OF REFRACTION
3989.0	884 • 2 883 • 8	3.00 9.00	-2.1	67.0	1111.3	640.6	30.0	9	1.000273
4500.0	867.6	8.6	-2.1	യയ	70.3	0.54	-0	. ។ ។ . ហ ន	. 90026
5500.0	• •	00	• co r	Š.	1025.4	62		, m	•
	: :	10.6		46.0	1000.1	O D	333.0	0 0	1.000252
_	-	10.8	9••	45.0	968.5		301.3	4.6	1.000243
7500.0 8000.0	:;	11.6	0 X	33.7	7. 616 934.1.	20.750	230.0	5.7	1.000233
-	6	9.6	-6.5	31.2	921.4		280.3	•	1.000223
	ŝ.	ر د د د	-7.3	32.0	908.4	Ð	27B.5	•	•
0.0000	722.3	? · ·	-8.0	32.7	895.7	653.0	276.3	•	1.000216
0500	696•1	**	0.6		870.7	650.1	6.602		• •
11000.0	683.2	3.5	-8-4	41.5	858.8	3.849	_		•
11500.0	670.5	7.5	, ,	47.U	947.1	646.	270-1	•	1.000206
12500.0	645.6		Э r	0 • 0 • 0 • 1	823.1 823.1	545.4	273.3	15.0	•
13000.0	633.4	6.1	. ~	26.0	809.9	643	270.7		
•	÷	6	-23.5	16.0	794.7		279.9	16.1	-
-	.		-22.6	17.1	779.1		5.05	15.2	1.00017
•	2000	9-1-0	-21.9	7.61	767.0		287.1	14.2	1.0001
15500.0	575.5	10.5	-23.1	21.0	4.66.6	0.000	9.460	11.9	1.0001
_	# # # 9S	-5.4	-54.5	21.0	734.0		298.9	10.7	1.0001
-	553.6	8 • • •	-25.4	21.0	723.6		303.3	9.6	-
17500.0	532.4		-27.7	21.0	7036.5	604.0	0.005	ر د و د	1.000
_	522.1	-10.5	-28.8	20.6	692.4		306.3	0.0	-
	511.9	-11-1	-29.6	20.0	_		308.0	12.4	
19000.0	501.8	-12.1	-30·¢	20.0	.69		309.1	Š.	.0001
	491.9	å	-31.9	18.8	•		510-1		.00014
	472.6	70.4	133.6	17.4	048.6	627	3115	٠	0000
-		Š	-35.4	16.2	5 &			: _	1000
:	3	٥	36.	S.	615.5		311.3		1000
•	8.44.5	17.	37.	ø	605.7	623.	310.6	1	.00013
~ .	ċ	e d	0.88.0	ġ,	96	621.	340.8	•	_
	•	•	•	10.0	ĝ		311.6	40.5	1.000132

STATION ALTITUDE 21 OCT 82 ASCENSION NO 51		3989.00 FEFT MSL. 7730	FT MSL	-	UPPER AIR DATA 2940020511 WHITE SANDS TASLE 10 Cont'd	uala 11 DS Cont'd		GEODETI 32. 106.	GEODETIC CUCKUINATES 32.40043 LAT DEG 106.37033 LON DEG
GEOMETRIC ALTITUDE MSL FEET	PRESSURE WILLIBARS	TEMI AIR DEGREES	GEOMETRIC PRESSURE TEMPERATURE ALTITUME AIR DEMPOINT MSL FEET MILLIBARS DEGREES CENTIGRADE	REL.HUM. PERCENT	REL.HUM. DENSITY SPEED OF PERCENT GM/CUBIC SOUND METER KNOIS	SPEED OF SOUND KNOTS	WING DATA DIRECTION SPEED REGREES(IN) KNOTS	SPEED KNOTS	INJEX OF REFRACTION
23500.0 24000.0 24500.0 25000.0	416.4 409.9 401.5	-20.8 -21.9 -23.1	######################################	17.1 19.8 22.5	577 568 558 59 59 59	577.4 619.0 568.2 617.5 559.2 616.1 549.9 614.9	312.8	41.4	1.000130 1.000128 1.000126

STATION ALTITUDE 3989.00 FEFT MSL 21 OCT. 82 ASCENSION NO. 511			MANDATORY LEVELS 2940020511 WHITE SANDS TABLE 11	11 13 55		GEODETIC COOKDINATES 32.40043 LAT DEG 106.37033 LON DEG
PRESSURE	PRESSURE GEOPOTENTIAL	TEMPI	TEMPERATURE	REL. HUM.		ATA
MILLIBARS	FEFT	DF GREES (CENTIGRADE	rexcell.	DIKEL 10N	SPEED KNOTS
850.0	.0 5055.	10.1	-1.0	40.	6.3	4.2
•008		10.7	J. (46.	310+3	e. t
750		4.4	-6.5	31.	280 • 3	7.2
0.00		5.3	-9.3	94.	270.7	9.5
.059		٠.	-18.2	39•		0.61
•009		-1.5	-22.0	19.		14.0
- 025		-7.3	-25.8	21.		9.6
200		-12.3	-30.6	20•		5. 4
450·		-16.8	-36.6	16.		55.4
*007		-23.3	-38.6	23.	i	

SIGNIFICANT LEVEL DATA 2940160109 LC-37 TABLE 12 SIGNIFIC COOKDINATES 32.40175 LAT DEG	TEMPERATURE REL.HUM. AIR DEWPUIN! PERCENT DEGREES CEVIIGRALE	-3.4 51.0		-3.2 39.0		2 47.0						-17.5 27.0					-33.1 14.0		
SIGNTFICANT L 2940160 LC-37 TABLE 12	TEMPER AIR DEGREES C	0.9	0.6	10.1	11.2	10.6	12.1	5.6	5• 0	1.6	٠,	6	-1.3	P: -	-2.1	-8.8	-10.9	-13.0	
4SL	PRESSURE GEOMETRIC ALTITUDE ILLIBARS MSL FEET	4051.4	4520.9	5088.7	5438.5	6476.3	7535.1	10392.5	11547.3	11833.9	12552.6	12913.6	13270.1	13968.5	15106.9	17719.3	19164.6	20706.5	
4051.37 FEET MSL 9 7830 MDT	PRESSURE MILLIBARS	883.3	868.1	850.2	839.4	808.2	777.6	700.0	4.079	663.2	642°4	636.6	628.0	611.5	585.5	529.1	#866h	470.1	
STATION ALTITUDE 40 21 Oct. 82 Ascension no. 109																			

TABLE 13 106-312-22 LON TABLE 13 106-312-22 LON	STATION AL	UDE 4	051.37 FEET 0830 MDT	T MSL		UPPER AIN DAIA 2940180109 LC-37	UATA 09		vEODETIC 32.40	C COUNDINATES 40175 LAT DEG
PRESSURE IEMPERATURE REL.HUM DENSITY SPEED OF "INLUDATA DATA NATIONAL SOURCH CONTINUE SOURCE	SION					-			106.	-1 N
MILLIARR DEWEOLINT PERCENT GMYCURLC SCUND DIRECTION SPEED NOTES HERES CENTIONARY PERCENT GMYCURLC SCUND DIRECTION SPEED STATE	TRIC		TEMP	ERATURE	EL.HUM	DENSITY	SPEEU OF	WIND DA	TA	INCEX
866.8 8.9 -3.4 51.0 1100.1 651.6 311.6 681.3 311.6 682.4 685.8 9.9 -3.5 41.4 1023.7 656.2 311.6 681.9 311.6 682.4 11.2 -1.5 41.4 1023.7 656.2 311.6 681.1 11.3 -1.3 11.6 681.2 11.3 -1.3 11.6 657.7 311.6 681.2 11.3 11.5 657.7 311.6 681.1 11.3 11.3 11.4 1023.7 657.4 311.6 681.1 11.3 11.3 11.4 1023.7 657.4 311.6 6.1 11.3 11.4 10.2 10.2 11.3 11.4 10.2 10.2 11.3 11.4 10.2 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.4 10.2 11.3 11.3 11.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.4 10.3 11.3 11.3 11.3 11.3 11.3 11.3 11.3	UDE EET		0	DEWPOINT CENTIGRADE	₽	GM/CUBIC METER	SCUND ANOTS	DIRECTION DEGREES(IN)	SPEEU KNOTS	OF REFRACTION
8668 8.9 -3.5 41.4 1071.0 654.9 311.6 .8 853.0 19.3 19.4 1023.7 657.4 311.6 2.6 852.6 10.9 -3.5 10.4 1023.7 511.6 2.6 852.6 10.9 -3.5 10.2 2.6 311.6 2.7 750.5 11.3 -3.5 24.8 960.7 511.6 2.6 750.6 12.1 -3.5 24.8 960.7 511.6 2.6 750.6 12.1 -3.5 24.8 960.7 511.6 2.6 750.6 12.1 25.0 952.2 250.6 26.1 2.6 750.6 26.6 26.1 26.0 952.2 250.6 26.1 750.6 26.6 27.7 27.7 27.7 26.1 27.2 69.7 27.7 27.7 27.7 27.7 27.7 27.7 27.7 27.7 27.7 27.7 27.7	•	883.3	0.9	·	-	1100.1	651	•	•	•
855.0 9.9 -3.3 39.3 100.0 656.2 3116 1.7 11.0 656.2 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	0.00	868.8	8.9	'n	-	1071.0		311.6	Φ.	•
89375 11.2 -1.5 41.4 1023.7 557.7 311.6 2.6 1 1 1 1 2 -1.5 41.4 1023.7 557.7 311.6 2.6 1 1 1 2 1 1 2 1 2 2 4 4 2 1006.0 557.2 311.6 3.5 1 1 1 2 1 2 2 2 4 8 949.4 557.8 257.9 311.6 3.5 1 1 1 2 2 2 2 5 6 9 95.2 657.8 257.4 311.6 3.5 1 1 1 2 2 2 2 2 2 6 2 2 2 2 2 2 2 2 2 2	0.000	853.0	6.6	ě	ċ	1047.5	656.2	311.6	1.7	•
8022** 10.9 8 44.2 100.9 8 44.2 100.9 1.3 3.5.5 908.5 57.6 311.6 4.3 11.9 3.5.5 11.9 1.5 22.6 935.5 657.6 297.4 57.1 764.4 11.0 1.5 22.6 935.5 657.5 265.9 65.1 17.6 65.1 17.6 65.1 17.6 65.1 17.6 65.1 17.6 65.1 17.6 65.1 17.6 65.2 </td <td>0.00</td> <td>837.5</td> <td>;</td> <td>=</td> <td>•</td> <td>1023.7</td> <td>657.7</td> <td>311.6</td> <td>2.6</td> <td>•</td>	0.00	837.5	;	=	•	1023.7	657.7	311.6	2.6	•
782.9 110.0 -5.3 46.5 988.5 657.2 511.0 654.4 110.0 -5.3 54.6 949.4 650.5 511.0 654.4 110.0 -6.2 5.0 935.5 657.2 511.0 654.4 110.0 -6.2 5.0 935.5 657.3 528.5 657.5 528.5 657.	•	822.4	ċ	•	•	•	657.4	311.6	3.5	•
778.6 12.1	•	702-0	-	1 1	40.0 V	988.5		311.6	n.	•
750.5 9.9 9.9 -9.1 25.0 935.5 55.0 256.0 95.0 17.0 256.0 935.5 55.0 17.0 256.0 935.5 55.0 17.0 256.0 935.5 55.0 17.0 256.0 93.2 55.0 17.0 256.0 95.0 17.0 256.0 95.0 17.0 256.0		778-6	→ へ	りト	C 4	2.000		20.48.	1.0	62000.
750.5 750.5 750.5 750.5 750.6	000	764.4	, ~	·œ	25.0	935.5		202°	7.9	.0002
730.8 8.8 -9.1 27.1 909.0 654.6 294.2 4.2 7.2 6.6 7.6 694.2 5.3 2.60.6 6.9 7.6 694.2 5.3 2.60.6 6.9 7.6 694.2 5.3 2.60.6 6.9 7.6 694.2 5.3 2.60.6 5.3 2.60.6 697.2 5.3 10.4 653.3 2.60.6 5.0 7.6 694.3 2.7 -8.2 7.6 649.1 2.05.9 6.0 7.6 649.1 2.05.9 7.6 649.1 2.05.9 7.6 649.1 2.05.9 7.6 649.1 2.05.9 7.6 649.1 2.05.9 7.6 640.1 2.05.9 7.6 7.6 649.1 2.05.9 7.6 7.6 649.1 2.05.9 7.6 7.6 649.1 2.05.9 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6	8500.0	750.5	•	∞	26.0	922.2		286.2	5.1	1.00022
7234 7.6 -9.6 28.1 896.1 653.3 220.6 5.0 110.2 697.2 59.2 803.4 652.0 267.2 571.2 5.0 110.2 59.2 803.4 652.0 268.9 7.6 110.2 59.2 803.4 652.0 268.9 7.6 110.2 59.2 804.3 14.7 265.9 9.7 110.2 59.0 14.4 846.5 649.1 205.9 9.7 110.2 12.1 39.0 832.7 642.9 274.3 13.7 13.6 12.6 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13	90000	730.8	8.8	ഠ	27.1	0.606	9	294.2	4.2	1.00021
710.2 6.5 -10.2 29.2 603.4 652.0 271.2 6.0 1.0 664.3 4.0 52.0 266.8 7.6 1.0 664.3 4.0 37.4 650.6 650.6 205.4 11.0 1.0 37.4 650.6 649.1 205.4 11.0 1.0 571.6 2.7 -8.2 44.4 645.5 647.7 205.4 11.0 1.0 624.5 -1.0 39.0 655.4 642.9 205.4 11.0 1.0 622.5 -1.0 -23.8 15.7 796.3 642.9 201.3 13.6 11.0 1.0 622.5 -1.0 -23.8 15.7 796.3 642.9 201.3 13.6 11.0 1.0 565.6 -3.1 -23.7 15.1 779.5 643.6 201.3 13.6 11.0 1.0 565.6 -3.1 -23.7 15.1 779.5 643.6 201.3 13.6 11.0 1.0 565.6 -3.1 -23.7 16.9 752.7 042.7 208.8 13.0 11.2 1.0 565.6 -3.1 -23.7 16.9 752.7 03.8 8 296.5 11.0 11.2 1.0 565.6 -3.1 -23.7 16.9 772.7 03.8 8 296.5 11.0 11.2 1.0 565.6 -3.1 -20.2 18.3 711.7 03.8 8 296.5 11.0 11.2 1.0 565.6 -3.1 -20.2 18.3 711.7 03.8 8 296.5 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11	9000	723.4	7.6	9•6-	28.1	896.1	9	580.6	5.0	1.00021
684.3 -10.3 31.4 870.9 650.6 256.8 7.6 10.8 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11	0000	710.2	6.5	-10.2	29.5	883.4	9	271.2	0.9	–
694.3 4.0 -9.0 37.9 856.6 649.1 255.9 9.7 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	0000	697.2	•	-10.3	31.4	870.9		506.8	7.6	Ä
659.0 2.7 -8.2 44.4 846.5 647.7 205.4 11.9 1659.0 3.4.2 34.0 645.9 645.9 205.4 11.9 1659.0 3.4.3 39.0 822.7 645.9 209.9 13.5 13.5 15.1 77.6 3.4.2 643.6 204.3 13.5 13.5 14.0 200.9 200.9 13.5 14.0 200.9 200.9 13.5 13.5 14.0 200.9 200.9 13.5 13.5 14.0 200.9 200.9 13.5 13.5 14.0 200.9 200.9 13.5 14.0 200.9 200.9 15.1 7.5 14.0 641.8 292.5 11.9 15.1 7.5 14.5 641.8 292.5 11.9 15.1 7.5 14.3 200.8 292.5 11.9 15.1 7.5 14.3 200.8 292.6 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11	0000	684.3	•	0.6-	37.9	856.6		502.9	4.4	Ť
659.0 1.3 -11.1 39.0 835.4 642.9 259.9 12.7 11.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0	0.00	671.6	•	-8.2	4.44	846.5		205.4	11.9	Ä
634.5 -1.0 -13.8 15.7 796.3 643.0 274.0 13.2 15.0 15.0 15.0 15.1 779.5 643.6 264.8 13.2 13.2 15.1 779.5 643.6 264.8 13.2 13.2 15.1 779.5 643.6 264.8 13.2 13.2 15.0 776.3 642.9 201.3 13.2 15.0 776.5 643.6 264.8 13.2 13.2 15.6 -1.0 -23.1 16.9 774.6 641.8 297.5 11.9 13.2 15.6 -4.4 -24.7 18.7 732.7 538.8 297.5 11.9 11.2 15.6 -4.4 -24.7 18.7 732.7 538.8 297.5 11.9 11.2 15.8 15.0 10.5 11.0 11.2 15.8 15.0 10.5 11.0 11.2 15.0 10.5 11.0 11.2 15.0 10.5 11.0 11.2 15.0 10.5 11.0 11.0 11.0 11.0 11.0 11.0	900	659.0		~ ^	39.0	835.4		200.0	12.7	1.0001
622.5 -1.0 -23.8 15.7 796.3 643.6 264.8 13.2 13.2 15.1 779.5 643.6 264.8 13.2 13.2 15.1 779.5 643.6 264.8 13.2 13.2 15.1 779.5 643.6 264.8 13.2 13.2 16.9 754.6 641.8 292.5 11.9 11.2 15.6 -4.4 -24.7 16.9 754.6 641.8 297.0 11.2 11.9 15.5 55.6 -4.4 -24.7 16.7 722.1 637.3 299.8 11.9 11.2 15.7 722.1 637.3 299.8 9.9 9.9 11.2 15.8 -8.2 -27.0 18.1 701.4 634.2 348.2 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	9.00	634.5	•	18	24.40	811.5		278.0	10.0	1000-1
610.83 -23.7 15.1 779.5 643.6 284.8 13.2 12.6 13.2 16.9 767.0 642.7 288.8 12.6 12.6 12.6 12.6 12.6 13.2 11.9 12.6 13.1 754.6 641.8 292.5 11.9 11.2 15.6 -3.1 -23.5 18.8 7 743.5 640.4 297.0 11.2 11.9 11.2 15.6 -4.4 -24.7 18.7 732.7 638.8 294.5 11.9 11.2 15.7 -5.7 -25.7 18.7 732.7 638.8 294.5 11.9 11.2 15.6 -8.2 -29.5 17.2 690.4 633.0 299.6 9.9 13.0 533.6 -8.2 -29.5 17.2 690.4 633.0 346.2 20.7 533.6 14.5 667.4 631.3 345.9 21.3 40.2 533.6 11.4 -33.5 14.2 656.1 630.4 334.0 22.5 13.6 613.8 623.4 627.7 271.9 42.2 14.5 667.4 621.3 245.9 21.6 446.1 -12.7 -34.9 17.6 613.8 625.0 297.5 37.8 446.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 437.1 -16.9 -35.2 18.6 594.2 62.3 1		622.5	-1.0	-23.8	15.7	796.3		201.3	13.6	1.000182
599.2 -1.1 -23.1 16.9 767.0 642.7 288.5 12.6 11.9 576.6 -1.9 -22.7 18.6 641.8 292.5 11.9 11.2 15.6 -3.1 -23.5 18.8 743.5 640.4 292.5 11.9 11.2 15.6 -3.1 -23.7 18.7 732.7 58.8 294.5 11.9 11.2 15.6 -4.4 -24.7 18.7 732.7 538.8 294.5 11.9 11.2 15.4 -25.7 -25.9 18.5 722.1 536.8 294.5 11.9 11.2 15.3 -9.2 -29.5 17.2 670.4 633.0 348.2 13.0 9.2 13.0 533.6 -9.2 -29.5 17.2 670.4 633.0 9.1 25.5 13.0 15.0 670.4 631.3 345.9 21.3 14.2 667.4 631.3 345.9 21.3 14.2 667.4 631.3 345.9 21.5 11.4 -33.5 14.5 667.4 631.3 345.9 21.5 14.5 667.4 621.3 245.9 21.5 14.5 667.4 621.3 245.9 22.5 14.5 644.9 629.6 220.7 27.5 27.8 33.5 14.5 663.4 627.7 271.9 42.2 14.5 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.5 37.8 663.4 627.2 627.5 37.8 663.4 6	•	610.8	F	-23.7	15.1	779.5		284.8	13.2	1.000178
587.9 -1.9 -22.7 18.6 754.6 641.8 292.5 11.9 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.0 11.2 11.2 15.5 640.4 297.5 11.2 11.2 15.5 640.4 297.5 11.2 11.2 15.5 65.6 14.2 295.8 9.9 1.2 15.0 15.0 67.4 637.3 299.8 9.9 1.2 12.0 1.2 12.0 1.2 12.0 1.2 12.0 1.2 12.0 1.2 12.0 1.2 12.0 1.2 12.0 1.3 14.2 652.1 630.4 534.0 295.4 256.2 14.5 644.9 625.4 220.9 33.5 14.2 652.1 12.0 27.2 15.6 613.8 625.0 297.5 37.8 17.8 633.1 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	•	599.2	-1.1	-23.1	16.9	767.0	30	2.88.5	C	1.000176
5566 -3.1 -23.5 18.8 743.5 640.4 297.0 11.2 565.6 -4.4 -24.7 18.7 722.1 637.3 299.6 10.5 <td>•</td> <td>587.9</td> <td>-1.9</td> <td>-22.7</td> <td>18.6</td> <td>754.6</td> <td></td> <td>292.5</td> <td>-</td> <td>•</td>	•	587.9	-1.9	-22.7	18.6	754.6		292.5	-	•
565.6 -4.4 -24.7 18.7 732.7 538.8 296.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	•	576.6	-3-1	-23.5	18.8	743.5		. 6	~	•
553.4 -5.7 -25.9 18.5 722.1 537.3 259.5 9.9 1.0 253.5 -5.2 -5.5 18.5 711.7 535.8 502.0 9.9 1.0 253.5 -5.2 -29.5 17.2 533.5 -5.2 -5.2 17.2 533.5 -5.2 17.2 533.0 67.4 634.2 346.2 13.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	-	565.6	# ! # !	-54.7	18.7	732.7		296.5	ċ	•
533.6 -8.2 -28.2 18.1 701.4 634.2 346.2 13.0 1.0 523.8 -9.2 -28.2 18.1 701.4 634.2 346.2 13.0 1.0 523.3 -9.2 -29.5 17.2 679.8 634.2 346.2 13.0 1.0 513.1 -9.9 -31.0 15.8 667.4 631.3 345.9 21.3 1.0 7.3 14.2 656.1 630.4 318.0 21.3 1.0 474.0 -12.7 -34.0 14.9 656.1 630.4 318.0 21.5 1.0 474.0 -12.7 -34.0 14.9 623.4 627.7 271.9 42.2 1.0 455.2 -14.7 -34.9 17.6 603.8 625.0 297.5 37.8 14.8 673.8 625.0 297.5 37.8 14.8 673.8 625.0 297.5 37.8 14.8 673.8 625.0 297.5 37.8 14.8 673.8 625.0 297.5 37.8 14.8 673.8 625.0 202.7 271.9 42.2 1.0 698.3 -18.9 -35.2 18.6 594.2 62.3 7.8 14.8 67.8 62.2 37.8 14.8 67.8 67.8 67.8 67.8 67.8 67.8 67.8 67	-	7.50	i i	-25.9	18.5	722.1		244.6	6.6	-
223.3 -9.2 -29.5 17.2 670.4 633.0 5.9.5 15.0 17.2 670.4 633.0 9.1 25.5 17.2 670.4 633.0 9.1 25.5 17.2 670.4 633.0 9.1 25.5 17.2 657.4 631.3 345.9 21.3 17.2 657.4 631.3 345.9 21.3 17.2 657.4 631.3 345.9 21.3 17.2 657.4 631.3 345.9 21.3 17.2 657.4 631.3 345.9 21.3 17.2 657.4 631.3 345.9 21.3 17.2 644.9 629.6 295.4 26.2 17.4 17.4 17.4 17.4 17.4 17.4 17.4 17.4	•	4.4.4.7		0.72	70.7	701		302+3	, .	-
513-1 -9.9 -31.0 15.0 678-8 632-2 9.1 25.5 1.5 1.0 15.0 678-8 632-2 9.1 25.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0			200	7.07	101	*•10°		3.010	13.0	-
503-1 -10-7 -32-6 14.5 567-4 631-3 345-9 21-3 1:00015 493-2 -11-4 -33-3 14.2 6567-4 631-3 345-9 21-3 1:00015 493-5 -12-0 -33-6 14.5 654-9 629-6 295-4 26-2 1:00014 474-0 -12-7 -34-0 14.9 633-8 628-8 280-9 33-5 1:00014 64-5 -13-6 -34-2 15-6 623-4 627-7 271-9 42-2 1:00014 425-2 -14-7 -34-9 17-6 603-8 625-0 297-5 37-8 1:00013 63-3 -18-9 -35-2 18-6 594-2 62-3 18-6 594-2 62-3 18-6 594-2 62-3 18-6 594-8 622-3 18-6 1-00013 1:00013 1:00013		5.50	300	241	2 4	0 0 C 9		6	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
#83.5		503.1	7.0.1	7.00	1 t	667.5		447.0		01000
#83.5 -12.0 -33.6 14.5 644.9 629.6 295.4 26.2 1.00014 174.0 -12.7 -34.0 14.9 633.8 620.8 260.9 33.5 1.00014 184.5 -13.6 -34.2 15.6 623.4 627.7 271.9 42.2 1.00014 185.2 -14.7 -34.5 16.6 613.5 620.3 282.6 39.6 1.00013 1846.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 1.00013 1837.1 -16.9 -35.2 18.6 594.2 62.7 100013		493.2	-11.4	130 m	14.5	656.1		318.0	21.6	41000
474.0 -12.7 -34.0 14.9 633.8 626.8 280.9 33.5 1.00014 464.5 -13.6 -34.2 15.6 623.4 627.7 27.9 42.2 1.00014 455.2 -14.7 -34.5 16.6 613.5 620.3 282.6 39.6 1.00013 466.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 1.00013 428.3 -16.9 -35.2 18.6 584.2 62.7 100013 428.3 -18.0 -35.6 19.6 584.8 622.3 100013		483.5	-12.0	-33.6	3	6.449		295.4	26.2	.0001
464.5 -13.6 -34.2 15.6 623.4 627.7 271.9 42.2 1.00014 9 455.2 -14.5 16.6 613.5 620.3 282.6 39.6 1.00013 9 446.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 1.00013 9 437.1 -16.9 -35.2 18.6 594.2 62.7 37.8 1.00013 9 428.3 -18.0 -35.6 19.6 584.8 622.3 1.00013		:	-12.7	3	14.9	633.8		560.9	33.5	.00013
9 455.2 -14.7 -34.5 16.6 613.5 620.3 282.6 39.6 1.00013 9 446.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 1.00013 9 437.1 -16.9 -35.2 18.6 594.2 62.7 297.5 10.0013 9 428.3 -18.0 -35.6 19.6 584.8 622.3		•	÷	3	15.6	623.4		271.9	42.2	.00014
) 446.1 -15.8 -34.9 17.6 603.8 625.0 297.5 37.8 1.00013 9 437.1 -16.9 -35.2 18.6 594.2 62.7 297.5 17.8 1.00013 9 428.3 -18.0 -35.6 19.6 584.8 622.3 1.00013		•	-14.7	3	16.6	613.5	9	N	39.6	.00013
9 428.3 -18.0 -35.6 19.6 554.8 523 1.00013	0000	•	-15.8	3	17.6	603.B	2	:	37.8	.00013
9 424.3 -18.0 -35.6 19.6 534.8 622.3 1.00013	0000	2	•	35	18.6	594.2	020			.00013
	000	8	6	35	19.6	584.8	622			.00013

STATION ALTITUDE 40 21 OCT: 82 ASCENSION NO. 109	TITUDE 40	4051.37 FEFT MSL 0830 MDT 09	FT MSL		UPPER AIR DAIR LC-37 TABLE 13 Cont'd	ont'd		GEODETI 32• 106•	VEODETIC COORDINATES 32.40175 LAT DEG 106.31232 LON DEG
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILL IBARS	TEM AIR DEGREES	GEOWETRIC PRESSURE TEMPERATURE FALTITUDE AIR DEWPOINT FALTITUDE MILLIBARS DEGREES CENTIGRADE	REL.HUM. FERCENT	REL.HUM. DENSITY SPEED OF PERCENT GMZCUBIC SOUND METER KNOTS	SOUND SOUND KROTS	WIND DATA PIRECTION SPEED DEGREES(IN) KNOTS	TA SPEED KNOTS	INUEX OF REFRACTION
24000.0	411.3	-20.2	-36.5	21.6	566.4 557.5	619.6			1.000128

	MANDATORY LEVELS	
STATION ALTITUDE 4051.37 FEFT MSL	2940180109	VEODETIC COOKDINA
21 oct. 62 U830 MUT	LC-37	32.40175 LAT
ASCENSION NO. 109	TABLE 14	106.31232 LON

0830 NUT	٦ ٢		2940180189 LC-37 TABLE 14	<u> </u>		9E0DETIC CO 32-4017 136-3123
PRESSURE GMILLIBARS	PRESSURE GEUPOTENTIAL	TEMI DEGREES	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA DIRECTION SPI NEGREES(IN) KN	DATA SPEED) KNOTS
850.n	5091.	10.1	-3.2	39.	311.6	1.8
800.0	6750	11.0	-1.6	41.	304.7	4.7
750.0	8517.	6.6	-8.7	2°	780.4	5,1
700.0	10382.	5.6	-10.6	30.	267.1	7.1
650.0	12352.	••	-11.8	39•	273.1	10.3
0.009	14450.	-1:1	-23.1	17.	268.2	14.7
F50.0	16706.	-6.2	-26.4	10.	300.5	9.6
500.0	19127.	-10.9	-33.0	14.	337.8	20.8
450.0	21763.	-15.4	-34.7	17.	590.9	38.3
t000	24646.	-21.8	-37.2	23.		

ION ALTITUD T. e2 ISION NO.	ON ALTITUDE 3989.00 FEET MSL IT. 82 ISION NO. 512	MSL	SIGNIFIC 29 WH1	SIGNIFICANT LEVEL DATA 294,0020512 WHITE SANDS TABLE 15	ATA	GEODETIC COORDINATES 32-40043 LAT DEG 106-37033 LON DEG
	PRESSUM MILLIBAR	PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPE AIR Degrees	TEMPERATURE AIR DEWPOINI DEGREES CENTIGRAUE	REL.HUM. PERCENT	
	885.6	3989.0	9.5	1.4	57.0	
	875.7	4295.0	8.7	-2.0	47.0	
	868.9	4507.6	10.7	-1.4	43.0	
	850.0	5109.6	10.8	-1.6	45.0	
	814.8	6266.3	10.1	-1.6	0.11	
	805.3	6587.1	10.8	-1.3	43.0	
	791.6	7058.4	12.5	1.4-1	31.0	
	776.5	7588.1	11.8	-7.1	26.0	
	700.0	10400.8	4.6	-9.5	35.0	
	6.479	11374.4	2.5	-8.5	45.0	
	9229	12061.6	.	-10.7	43.0	
	639.7	12788.0	3	-50.6	0.02	
	613.6	13883.8	٥.	-20.1	20.0	
	554.0	16539.0	-7.1	-54.5	24.0	
	513.3	18484.4	-10.0	-30.3	17.0	
	500.0	19147.9	-11.7	-31.8	17.0	
	£.464	19436.8	-11.5	-32.2	16.0	
	474.1	20485.6	-13.1	-33.5	16.0	
	420.3	23464.9	-19.9	-34.0	27.0	
	400.0	24665.3	-23.3	-37.0	27.0	

STATION ALTITUDE 21 OCT. 82 ASCENSION NO. 5		3989.n0 FEET na34 MDT 2	T MSL		UPPER AIR DAI 2940020512 WHITE SAIDS TABLE 16	Da.I.A S.I.2 สมวั		9E00cTL 32-4 106-3	DETIL COOMOTHATES 32.4UU43 LAT DEG 1U6.3/U33 LON DEG
GEONETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATUPE AIR DEWPOIN DEGREES CENTIGRA	ب 10	REL . HUM. PERCENT	DENSITY OM/CUBIC	SPEED OF SOUND KNOTS	WIND DATE DIRECTION DEGREES(TW)	SPEEU KNOTS	INUEX OF REFRACTION
3989.0	885.6	S.6	37 (90 (57.0	_	55.	355.0	•	O.
0.0004	•	n (0 1	S	ر ا ري	355.2	4.1	1.000274
5000.0		9.0) i	1001		1.759	P•1	٠	0002
5500.0	8.48	9.01		40.4	• 4	2.100		•	2000
0.0009		10.3	-1.6	'n	900	3.5	7.07	2.9	1.000250
6500.0	807	10.6	-1.3	43.3		657.1	0.520	3.8	.000
7000.0	793	12.3	7.5	32.5	50.	6-859	302.5	0.9	
0.000	76.	11.0	5.5	26.8	-	28	301.5	. S	8
8500.0	750	9.5	7.7	0.00	953.4	00/00 00/00	324.5	2 C	1.000225
9000.0	737	8.2	-8.1	30.5		0.40	350.8	10	1.000214
9500.0	723.	6•9	-8.6	32.1	998.0	45.45	318.0	3.5	1.000216
10000.0	710	2.6	÷	33.7	886.3	651.0	282.1	0.4	1.000212
10500.0	169	# ·	ė,	36.0	•	649.5	258.3	6.3	1.000210
11000-0	200		80 c	41.2	861.5	1.840	253.6	3 · 60	1.000208
12000-0		1	D 4 6 1	0 m m m m m m m m m m m m m m m m m m m	047.0 047.0	വ	261.9	0.0	
12500.0	646	-	7	200	824.5	0.000	279.4	17.	1.000.00
13000.0	634		-20.5	20.0	809.6	24.5	279.6	7 67	1.000195
13500.0	622	0	ė	20.0	793.5	0.44.0	280.9) N	1.000183
14000.0	610	-:	-20-5	20.5	776.8	•	298.5	·v	1.300160
14500.0		-1.5	-21.0	ċ	767.9	642.3	303.3	~	1.900177
15000.0	536.	5.0	-21.7	.	757 . 1	C+00.1	505.5	12.4	1.000174
0.00041	2,45	7 4 4	5.4.5	ů,	C • 0 • 1	039•1	300.0	: (.000
16500.0		-7.0	-24-1	23.9	725.8		301.7	, d	1.000169
17000.0	544.	-7.8	-25.0	22.3	713.9	634.8	295.B		•
17500.0	•	-8.5	-27.1	ò	702.0	633.9	9.682	•	
18000.0	525.1	-9.3	-24.7	18.7	690.4	633.0	5,687	15.5	•
18500.0	013.0	0-01-	3:	17.0	79.	632.0	4.06%	•	•
0.00061	6.200	-	31.	17.0	99	030.5	300.4		1.000151
0.00561	1.00.0	111.0	ំ .	٠.	650.5	030-1	511.5	•	.0000
20500.0	100	٧×	•	ė.	, ,	Ġ.	313.2	•	1.000146
0.0000		1.01	133.5	ċ٠	•	å	313.5	•	1.000143
21500.0		מי) W	19.7	. t.	D	20175	35.6	1.000141
22000.0	•	-16.6	,	_	605.3	הו הו	10.0		7.1000.1
22500.0	437.0	-17.7	33.		5	1022 v	317.6		1000
23000.0	•	∞ −	-33∙8	25.3	5A6.5	021.4	519.3	37.1	1.000133

REL.HUM. DENSITY SPEED OF PERCENT GMZCUBIC SOULD	GEOMETRIC PRESSURE TEMPERATURE REL.HUM. DENSITY SPLED OF WIND DATA ALTITUDE ALTER MILLIBARS DEGREES CENTIGRADE METER MICHIBARS DEGREES CENTIGRADE 23500.0 419.7 -20.0 -34.1 27.0 577.4 619.9	STATION ALTITUDE 21 OCT. 82 ASCENSION NO. 51	TITUDE 394 NO. 512	3989-00 FFFT MSL 0934 MDT .2	T MSL		294*1323512 WHITE SANDS TABLE 16 Cont'd	le Ds Cont'd		9E0DET	GEODETIC COONDINATES 32-40043 LAT DEG 106-37033 LON DEG
MLILK NIGOLO	419.7 -20.0 -34.1 27.0	GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP AIR DEGREES	JERATURE Dewpoint Centigrade	REL . HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DA DIRECTION LEGREES(IN)	TA SPEED KNOTS	INJEX OF REFRACTION

N ALTITUL • 82 FON NO.	ALTITUDE 3989.n0 FF.t MSL 82 N พ 512	Fe T MSL		MANDATORY LEVELS 2940020512 WHITE SANDS TABLE 17	Evels 12 Ds		9E0DETIC COUMDINATES 32+4043 LAT DEG 106-37033 LOH DEG
	PRESSURE	PRESSURE GEOPOTENTIAL	TEM	PERATURE	HEL. HUM.		7
	MILLIBARS	FEET	DEGREES	DEGREES CENTIGRADE		JEGKEES (TN)	SPEED KNOTS
	850.0		10.8	-1.6	• 7 5		2.0
	A00.0	n 6763.	11.5	-2.2	36.	309.5	5.0
	750.0		4.6	-7.7	29.		
	7000		4.6	5.6-	35.		8.4
	9.059	•	••	-14.1	35.		12.8
	600°C		-1.4	-20.9	21.		12.8
	550.0	Ī	-7.4	-24.7	2.5		8.0
	2000		-111.7	-31.6	17.		25.5
	450.0	•	-16.0	-33.4	21.		36.4
	0.004	•	-23.3	-37.0	27.		

